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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/885,849	06/20/2001	Anders Heie	NC29331	4108

7590 03/29/2004  
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EXAMINER

FOX, BRYAN J

ART UNIT	PAPER NUMBER
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2686

DATE MAILED: 03/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/885,849

**Applicant(s)**

HEIE ET AL.

**Examiner**

Bryan J Fox

**Art Unit**

2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2001.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-20 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4/4-9-03.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

The disclosure is objected to because of the following informalities: on page 5, line 16, a reference to figure 2A is made, however, a figure 2A is not included in the drawings.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 15 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 15 recites the limitation "said memory" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Regarding claim 16, the word "and" on line 4 renders the claim indefinite. In the office action, the claim is treated as if the applicant intended to use "or" instead.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 17, 18 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Valentine et al. (US006011973A).

Regarding claim 17, Valentine et al. discloses a system for restricting operation of cellular telephones to well delineated geographical areas, where the means of determining location may include Global Positioning System (GPS), which receives transmissions from satellites to determine longitude and latitude coordinates (see column 2, lines 39-44), which reads on the claimed "wireless communication system in which an electronic device is receiving location information from at least one satellite". The system ascertains the location of the device, which reads on the claimed "determining a current location of the electronic device using the location information", checks whether operation is allowed, which reads on the claimed "evaluating said current location to determine if said current location is within at least one pre-defined zone", and either enables or disables the device accordingly (see figure 2), which reads on the claimed "executing an action to adjust one or more functions of the electronic device if determined that said current location is within said at least one pre-defined zone".

Regarding claim 18, Valentine et al. discloses that if the cellular telephone is prohibited from operating in its present geographical location, it disables the transceiver from transmitting (see column 2, lines 60-63).

Regarding claim 20, in the system disclosed by Valentine et al. once the device has left the area where operation is not allowed, operation is once again allowed, which

reads on the claimed "act of changing operation of all functions to preset defaults if determined that said current location is not within said at least one pre-defined zone".

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-4, 6, 7, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Valentine et al. in view of Fitch et al. (US006424840B1).

Regarding claim 1, Valentine et al. discloses a method and apparatus for restricting operation of cellular telephones to well delineated geographical areas that first ascertains the geographical location of the device, which reads on the claimed "determining a current location of the electronic device", then checks whether operation is allowed, which reads on the claimed invention that evaluates whether a zone is associated with a location, and finally either enable or disables operation accordingly (see figure 3), which reads on the claimed "executing an action to adjust a function of

the electronic device if...said current location is within at least one said zone".

Valentine et al. fails to teach the determining a current sector associated with said current location.

Fitch et al. discloses a method of location based zone assignment for a wireless communication network that identifies the location of the wireless communication device relative to the various network zones 20 and their respective coverage areas 22 (see column 5, lines 50-53 and figure 2). In at least one embodiment, the method of locating the wireless communication device is a cell/sector location system where the approximate location of the wireless communication device 16 is determined based on the cell sector that is handling its communications (see column 5, lines 61-67). It is also suggested that additional location methods may be employed to further refine the location of the wireless communication device. The system compares the wireless communication device to the current network topology definition to determine in which operating zone the wireless communication device is operating. Note that determining which zone a device is located can be equated with determining if a device is located in a zone when a default zone is defined comprising all areas not encompassed in a different zone.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Valentine et al. with Fitch et al. to include the above sector and zone location system in order to assist in the locating of a phone by narrowing down the area that a phone may be located.

Regarding claim 2, the combination of Valentine et al. and Fitch et al. discloses that the system compares the ascertained location of the mobile phone with information in the memory to determine whether the cellular telephone is authorized (see Valentine et al. column 2, lines 53-58), which reads on the claimed "step of evaluating comprises a step of defining parameters for at least one said zone", where the parameters defined are whether operation is allowed.

Regarding claim 3, the combination of Valentine et al. and Fitch et al. discloses a system where sectors are associated with zones and a zone may be associated with multiple sectors (see Fitch et al. figure 1).

Regarding claim 4, the combination of Valentine et al. and Fitch et al. discloses a system where a database associated with the cellular network contains information about the allowability of operation of the cellular telephone (see Valentine et al. column 3, lines 4-20), which reads on the claimed "retrieving said parameters form an external database".

Regarding claim 6, the combination of Valentine et al. and Fitch et al. discloses that the system may disable the transceiver 110 from transmitting if the cellular telephone is prohibited from operating (see column 2, lines 60-63), which reads on the claimed "step of executing said action comprises the step of turning off one or more transmitting functions of the electronic device".

Regarding claim 7, there is an inherent delay present in Valentine et al. when any action is performed corresponding to the time it takes to process and complete and command. Furthermore, a waiting period is disclosed in the combination of Valentine et

al. and Fitch et al. in the loop in figure 3 of Valentine et al. Since the system is in a loop, any operation performed would be after a delay.

Regarding claim 10, the combination of Valentine et al. and Fitch et al. discloses that once the device is outside of the area where operation is not allowed, operation is restored (see Valentine et al. figure 3), which reads on the claimed "changing operation of all functions to preset default modes if determined that said current location is not within at least one said zone".

Regarding claim 11, Valentine et al. discloses an apparatus for restricting operation of cellular telephones to certain areas that ascertains the geographical location of the telephone, which reads on the claimed "processor for determining a current position of the electronic device", then checks whether operation is allowed and enables or disables the phone accordingly, which reads on the claimed "executing an action if it is determined that...said current location is within at least one said zone". Valentine et al. fails to teach the determination of a sector and a zone associated with the position.

Fitch et al. discloses a method of location based zone assignment for a wireless communication network that identifies the location of the wireless communication device relative to the various network zones 20 and their respective coverage areas 22 (see column 5, lines 50-53 and figure 2). In at least one embodiment, the method of locating the wireless communication device is a cell/sector location system where the approximate location of the wireless communication device 16 is determined based on the cell sector that is handling its communications (see column 5, lines 61-67). It is also



suggested that additional location methods may be employed to further refine the location of the wireless communication device. The system compares the wireless communication device to the current network topology definition to determine in which operating zone the wireless communication device is operating. Note that determining which zone a device is located can be equated with determining if a device is located in a zone when a default zone is defined comprising all areas not encompassed in a different zone.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Valentine et al. with Fitch et al. to include the above sector and zone location system in order to assist in the locating of a phone by narrowing down the area that a phone may be located.

Claims 5, 8, 9 and 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Valentine et al. in view of Fitch et al. as applied to claims 1 and 11 above, and further in view of Kirbas et al. (US006701144B2).

Regarding claim 5, the combination of Valentine et al. and Fitch et al. fails to teach the process of a user inputting parameters of a zone.

Kirbas et al. discloses a system for automatically configuring features where a user inputs configuration data for various locations (see figure 2).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Valentine et al. and Fitch et al. with Kirbas et al. to include the above system of allowing a user to input location settings in order to provide users with the ability to customize their devices with their own preferences.

Regarding claim 8, the combination of Valentine et al. and Fitch et al. fails to teach specifically the use of a vibrate mode.

Kirbas et al. discloses a system that may automatically switch off the ringer and enter a vibrate mode (see column 1, lines 14-30), which reads on the claimed "changing profile setting of the electronic device to provide visual alert or vibrate alert without audio alert".

Regarding claim 9, the combination of Valentine et al, Fitch et al. and Kirbas et al. discloses that the ringer will be automatically reactivated when exiting a zone (see Kirbas et al. column 1, line 25), which reads on the claimed "step of increasing volume of an audio alert and volume of a speaker".

Regarding claim 12, the combination of Valentine et al. and Fitch et al. discloses the use of a database (see Valentine et al. column 3, lines 4-20). The database may be located in the base station, however it is still coupled to the cellular telephone via the cellular telephone network. However, the combination of Valentine et al. and Fitch et al. fails to distinctly point out the process of defining and storing parameters as claimed.

Kirbas et al. discloses a system where the user, via his mobile telephone, can input and store configurations relating to various locations (see figure 2).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Valentine et al. and Fitch et al. with Kirbas et al. to include the above system of allowing a user to input location settings in order to provide users with the ability to customize their devices with their own preferences.

Regarding claim 13, the combination of Valentine et al, Fitch et al. and Kirbas et al. discloses a system where sectors are associated with zones and a zone may be associated with multiple sectors (see Fitch et al. figure 1).

Regarding claim 14, the database disclosed by Valentine et al. (see column 3, lines 4-20) in the combination of Valentine et al, Fitch et al. and Kirbas et al. is associated with the cellular telephone network, which reads on the claimed "external database".

Regarding claim 15, the combination of Valentine et al, Fitch et al. and Kirbas et al. includes a method for a user to input parameters and storing them in memory (see Kirbas et al. figure 2).

Regarding claim 16, the combination of Valentine et al, Fitch et al. and Kirbas et al. discloses a possible configuration would be for a movie theater (see Kirbas et al. column 1, lines 14-27).

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Valentine et al. in view of Kirbas et al.

Regarding claim 19, Valentine et al. fails to specifically disclose a method for defining parameters and storing them in a database.

Kirbas et al. discloses a method that allows a user to input configurations corresponding to locations and store them in memory (see figure 2).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Valentine et al. with Kirbas et al. to include the above system of

allowing a user to input location settings in order to provide users with the ability to customize their devices with their own preferences.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Grube et al. (US005778304A) discloses a method for providing communication services based on geographic location.

Alexander, Jr. et al. (US006256506B1) discloses a method and system for creating a radio frequency signature for a signature region in a coverage area of a wireless communication system.

Brown et al. (US006690940B1) discloses a system for selective prevention of non-emergency use of an electronic device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryan J Fox whose telephone number is (703) 305-8994. The examiner can normally be reached on Monday through Friday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on (703) 305-4379. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BJF

*Nguyen*  
3-16-2004

NGUYEN T. VO  
PRIMARY EXAMINER